

RADIO DFS TEST REPORT

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Report No:STS1806172W05

Issued for

Prentke Romich Company

1022 Heyl Rd. wooster, Ohio 44691, United States

Product Name:	Accent 800			
Brand Name:	Accent			
Model Name:	ACN800-30			
Series Model:	N/A			
FCC ID:	2AD9PA-A80030PRC			
IC ID:	23408-ACN80030			
Toot Stondard	FCC Part 15.407			
Test Standard:-	RSS-247 Issue 2, February 2017			

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TEST REPORT CERTIFICATION

Applicant's name:	Prentke Romich Company					
Address:	1022 Heyl Rd. wooster, Ohio 44691, United States					
Manufacture's Name:	Prentke Romich Company					
Address:	1022 Heyl Rd. wooster, Ohio 44691, United States					
Product description						
Product Name:	Accent 800					
Brand Name:	Accent					
Model Name:	ACN800-30					
Series Model:	N/A					
Test Standards:	FCC Part 15.407					
	RSS-247 Issue 2, February 2017					
Test procedure	905462 D02 UNII DFS Compliance Procedures New Rules v02 905462 D03 UNII Clients Without Radar Detection New Rules v01r02					
equipment under test (EUT) is only to the tested sample identi This report shall not be repro	oduced except in full, without the written approval of STS, this evised by STS, personal only, and shall be noted in the revision of					
Date (s) of performance of tests						
Date of Issue	: 13 July 2018					
Test Result	Pass					
Testing Engine	(Chrischen)					
Technical Mana	ager : <u>Sean She</u> (Sean she)					
Authorized Sigr	A Buli					
	(Vita Li)					
	1/F., Building B, Zhuoke Science Park, No. 190, Chongqing Road, Fuyong Street, Bao'an District, Shenzhen, Guang					

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Revision History

Rev.	Issue Date	ue Date Report NO.		Issue Date Report NO. Effect Page Contents			
00	13 July 2018	STS1806172W05	ALL	Initial Issue			



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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards: KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02 and 905462 D03 UNII Clients Without Radar Detection New Rules v01r02

Part 15.407/ RSS-247							
Requirement	Operatio	onal Mode	RESULTS				
	Master	Client	RESOLIS				
Non-Occupancy Period	ccupancy Period Yes Yes		Pass				
DFS Detection Threshold	Yes	Not required	Not required				
Channel Availability Check Time	Yes	Not required	Not required				
Channel Closing Transmission Time	Yes	Yes	Pass				
Channel Move Time Yes		Yes	Pass				
U-NII Detection Bandwidth	Yes	Not required	Not required				

1.1 TEST FACTORY

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Add. : 1/F., Building B, Zhuoke Science Park, No.190, Chongqing Road, Fuyong Street, Bao'an District, Shenzhen, Guangdong, China CNAS Registration No.: L7649; FCC Registration No.: 625569

IC Registration No.: 12108A; A2LA Certificate No.: 4338.01;

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of **k=2**, providing a level of confidence of approximately **95** %_o

No.	Item	Uncertainty
1	DFS Threshold (radiated)	±1.50dB
2	DFS Threshold (conducted)	±1.45dB
7	Temperature	±0.5°C
8	Humidity	±2%





2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Product Name	Accent 800	Accent 800				
Brand Name	Accent	Accent				
Model Name	ACN800-30					
Series Model	N/A					
Model Difference	N/A					
	The EUT is Accer	nt 800				
		802.11a/n/ac(HT20):5260 MHz -5320 MHz				
		802.11a/n/ac(HT40):5270 MHz -5310 MHz				
	Operation	802.11ac(HT80) 5290MHz				
	Frequency:	802.11a/n/ac(HT20):5500 MHz -5700 MHz				
		802.11a/n/ac(HT40):5510 MHz -5670 MHz				
		802.11ac(HT80) 5775MHz				
Product Description	Modulation Type:	802.11a(OFDM):BPSK,QPSK,16-QAM,64-QAM 802.11n(OFDM):BPSK,QPSK,16-QAM,64-QAM 802.11ac(OFDM):BPSK,QPSK,16-QAM,64-QAM				
	Number Of Channel	Please see Note 2.				
	Antenna Gain(Peak)	0dBi				
	Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.					
Channel List	Refer to below					
Sub-class	H01					
Adapter	Power supply and Input: AC 100V-24 Output: DC 18V, 3	40V, 50/60Hz, 1500mA				
Battery	Battery(rating): Rated Voltage: 7.6V Charge Limit: 8.7V Capacity: 6000mAh					
Hardware version number	Ver C					
Software version number	Windows 10 Pro 64-bit					

Note:

1 For a more detailed features description, please refer to the manufacturer's specifications or

. the User's Manual.



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Channel List for 802.11a/n/ac (HT20)							
ChannelFrequency (MHz)ChannelFrequency (MHz)Cha nnelFrequency (MHz)ChannelFrequency (MHz)							
52							

Channel List for 802.11n/ac (HT40)							
ChannelFrequency (MHz)ChannelFrequency (MHz)Chan (MHz)Frequency (MHz)ChannelFrequency (MHz)							
54 5270 62 5310 (WH2) (WH2) (WH2)							

	Channel List for 802.11a/n/ac (HT20)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Chan nel	Frequency (MHz)	Channel	Frequency (MHz)	
100	5500	104	5520	108	5540	112	5560	
116	5580	120	5600	124	5620	128	5640	
132	5660	136	5680	140	5700			

Channel List for 802.11 n/ac (HT40)							
Channel Frequency Channel Frequency (MHz)							
102	5510	110	5550				
134	5670						

For 802.11ac (HT80)							
Channel Freq.(MHz) Channel Freq.(MHz)							
58	5290	106	5530				
		122	5610				

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3.EQUIPMENT UNDER TEST (EUT) DETAILS

The manufacturer declared values for the EUT operational characteristics that affect DFS are as follows

Operating Modes (5250 – 5350 MHz, 5470 – 5725 MHz)

] Master Device

Client Device (no In Service Monitoring, no Ad-Hoc mode)

Client Device with In-Service Monitoring

Antenna Gains / EIRP (5250 – 5350 MHz, 5470 – 5725 MHz)

	5250 – 5350 MHz		5470 – 5725 MHz	
	5300MHz (HT20)	5290MHz(HT80)	5580MHz(HT20)	5610MHz(HT80)
Lowest Antenna Gain (dBi)	0	0	0	0
Highest Antenna Gain (dBi)	0	0	0	0
DFS Detection Threshold (dBm)		-6	62	

Channel Protocol

\ge	IP Based
	Frame Based

The EUT did not require modifications during testing in order to comply with the requirements of the standard(s) referenced in this test report.

2.2 TEST CONDITIONS AND CHANNEL

	Normal Test Conditions	
Temperature	15°C – 35°C	
Relative Humidity	20% - 75%	
Supply Voltage	DC 7.6V	

	Channel List for 802.11a	ac
Band Frequency	EUT Channel	Test Frequency (MHz)
Band II	CH60	5300
	CH58	5290
Band III	CH116	5580
	CH122	5610

Note: (1) The measurements are performed at the lowest available channels.

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2.3 DFS MEASUREMENT INSTRUMENTATION

a. RADAR GENERATION SYSTEM

An Agilent PSG is used as the radar-generating source. The integral arbitrary waveform generators are programmed using Agilent's "Pulse Building" software and Elliott custom software to produce the required waveforms, with the capability to produce both unmodulated and modulated (FM Chirp) pulses. Where there are multiple values for a specific radar parameter then the software selects a value at random and, for FCC tests, the software verifies that the resulting waveform is truly unique.

With the exception of the hopping waveforms required by the FCC's rules (see below), the radar generator is set to a single frequency within the radar detection bandwidth of the EUT.

Frequency hopping radar waveforms are simulated using a time domain model. A randomly hopping sequence algorithm (which uses each channel in the hopping radar's range once in a hopping sequence) generates a hop sequence. A segment of the first 100 elements of the hop sequence are then examined to determine if it contains one or more frequencies within the radar detection bandwidth of the EUT. If it does not then the first element of the segment is discarded and the next frequency in the sequence is added. The process repeats until a valid segment is produced. The radar system is then programmed to produce bursts at time slots coincident with the frequencies within the segment that fall

in the detection bandwidth. The frequency of the generator is stepped in 1 MHz increments across the EUT's detection range.

The radar signal level is verified during testing using a CW signal with the AGC function switched on. Correction factors to account for the fact that pulses are generated with the AGC functions switched off are measured annually and an offset is used to account for this in the software. The generator output is connected to the coupling port of the conducted set-up or to the radar-generating antenna.

b. CHANNEL MONITORING SYSTEM

Channel monitoring is achieved using a spectrum analyzer and digital storage oscilloscope. The analyzer is configured in a zero-span mode, center frequency set to the radar waveform's frequency or the center frequency of the EUT's operating channel. The IF output of the analyzer is connected to one input of the oscilloscope and analyzer.

A signal generator output is set to send either the modulating signal directly or a pulse gate with an output pulse co-incident with each radar pulse. This output is connected to a second input on the oscilloscope and the oscilloscope displays both the channel traffic (via the if input) and the radar pulses on its display.

For in service monitoring tests the analyzer sweep time is set to > 20 seconds and the oscilloscope is configured with a data record length of 10 seconds for the short duration and frequency hopping waveforms, 20 seconds for the long duration waveforms. Both instruments are set for a single acquisition sequence. The analyzer is triggered 500ms before the start of the waveform and the oscilloscope is triggered directly by the modulating pulse train. Timing measurements for aggregate channel transmission time and channel move time are made from the oscilloscope data, with the end of the waveform clearly identified by the pulse train on one trace. The analyzer trace data is used to confirm that the last transmission occurred within the 10-second record of the

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oscilloscope. If necessary the record length of the oscilloscope is expanded to capture

the last transmission on the channel prior to the channel move.

Channel availability check time timing plots are made using the analyzer. The analyzer is triggered at start of the EUT's channel availability check and used to verify that the EUT does not transmit when radar is applied during the check time.

The analyzer detector and oscilloscope sampling mode is set to peak detect for all plots.

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Signal Generator	Agilent	M11C182A	MY46240556	2017.10.15	2018.10.14
Signal Analyzer	Agilent	N9020A	MY49100060	2017.10.15	2018.10.14
Coupler	Rio tinto in overseas	ZFSC-2-11	15542	2017.10.15	2018.10.14
Coupler	Rio tinto in overseas	ZN2PD-9G	SF078500430	2017.10.15	2018.10.14
Attenuator	HP	8494B	DC-18G	2017.10.15	2018.10.14
Router	TP-LINK	TL-WR885N	1125074010735	N.C.R	N.C.R
PC	HP	500-320cx	4CV428DQYN	N.C.R	N.C.R

2.4 EQUIPMENTS LIST FOR ALL TEST ITEMS



3. DFS PARAMETERS

3.1 DFS PARAMETERS

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode			
	Master	Client Without Radar Detection	Client With Radar Detection	
Non-Occupancy Period	Yes	Not required	Yes	
DFS Detection Threshold	Yes	Not required	Yes	
Channel Availability Check Time	Yes	Not required	Not required	
U-NII Detection Bandwidth	Yes	Not required	Yes	

Table 2: Applicability of DFS requirements during normal operation

Requirement	uirement Operational Mode	
	Master Device or Client with Radar Detection	Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar Detection	Client Without Radar Detection
U-NII Detection Bandwidth and	All BW modes must be	Not required
Statistical Performance Check	tested	
Channel Move Time and Channel	Test using widest BW mode	Test using the widest
Closing Transmission Time	available	BW mode available
		for the link
All other tests	Any single BW mode	Not required
Note: Frequencies selected for statistical p	performance check (Section 7.8	.4) should include
several frequencies within the rada	r detection bandwidth and frequ	encies near the edge of
the radar detection bandwidth. For	802.11 devices it is suggested t	to select frequencies in

each of the bonded 20 MHz channels and the channel center frequency.

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Table 3: DFS Detection Thresholds for Master Devices and Client Devices With Radar Detection

Maximum Transmit Power	Value
	(See Notes 1, 2, and 3)
$EIRP \ge 200 milliwatt$	-64 dBm
EIRP < 200 milliwatt and	-62 dBm
power spectral density < 10 dBm/MHz	
EIRP < 200 milliwatt that do not meet the power spectral	-64 dBm
density requirement	
Note 1: This is the level at the input of the receiver assuming a 0 dBi	receive antenna.
Note 2: Throughout these test procedures an additional 1 dB has been transmission waveforms to account for variations in measurement eq	

test signal is at or above the detection threshold level to trigger a DFS response.

Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

Table 4: DFS Response Requirement Values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds
	See Note 1.
Channel Closing Transmission Time	200 milliseconds + an
	aggregate of 60
	milliseconds over
	remaining 10 second
	period.
	See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-
	NII 99% transmission
	power bandwidth. See
	Note 3.

Note 1: *Channel Move Time* and the *Channel Closing Transmission Time* should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The *Channel Closing Transmission Time* is comprised of 200 milliseconds starting at the beginning of the *Channel Move Time* plus any additional intermittent control signals required to facilitate a *Channel* move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the *U-NII Detection Bandwidth* detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

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Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width	PRI (µsec)	Number of Pulses	Minimum Percentage of	Minimum Number
	(µsec)			Successful	of
	N /			Detection	Trials
0	1	1428	18	See Note 1	See Note
					1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 µsec, with a minimum increment of 1 µsec, excluding PRI values selected in Test A	Roundup $\begin{cases} \left(\frac{1}{360}\right).\\ \left(\frac{19\cdot10^6}{\text{PRI}_{\mu\text{sec}}}\right) \end{cases}$	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate	(Radar Types	1-4)		80%	120
			used for the detection ba	ndwidth test, ch	annel move

time, and channel closing time tests.

Table 5a - Pulse Repetition Intervals Values for Test A

Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)
1	1930.5	518
2	1858.7	538
3	1792.1	558
4	1730.1	578
5	1672.2	598
6	1618.1	618
7	1567.4	638
8	1519.8	658
9	1474.9	678
10	1432.7	698
11	1392.8	718
12	1355	738
13	1319.3	758
14	1285.3	778
15	1253.1	798
16	1222.5	818
17	1193.3	838
18	1165.6	858
19	1139	878
20	1113.6	898
21	1089.3	918
22	1066.1	938
23	326.2	3066

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The aggregate is the average of the percentage of successful detections of Short Pulse Radar Types 1-4. For example, the following table indicates how to compute the aggregate of percentage of successful detections.

Radar Type	Number of Trials	Number of Successful Detections	Minimum Percentage of Successful				
			Detection				
1	35	29	82.9%				
2	30	18	60%				
3	30	27	90%				
4	50	44	88%				
Aggregate (82.9% + 60% + 90% + 88%)/4 = 80.2%							

Long Pulse Radar Test Waveform

Table 6 – Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulses per <i>Burst</i>	Number of <i>Bursts</i>	Minimum Percentage of Successful Detection	Minimum Number of Trials
5	50-100	5-20	1000- 2000	1-3	8-20	80%	30

Figure 1 provides a graphical representation of the Long Pulse Radar Test Waveform.

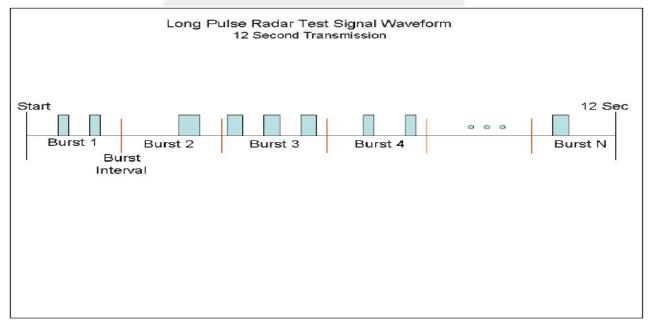


Table 7 – Frequency Hopping Ra	adar Test Waveform
--------------------------------	--------------------

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30



3.2 DFS –TEST RESULTS

3.2.1 TEST RESULTS- FCC Part 15.407& RSS-247 CLIENT DEVICE

F	CC Part 15.4	07&RSS-247	Client Device	Test Result Su	mmary		
Description	Radar Type	Radar Frequency	Measured Value	Requirement	Test Data	Status	
		5300	240 ms				
Channel closing	1	5290	240 ms	<260ms	3.3.4	Complian	
transmission time	I	5580	240 ms	<200105		Complies	
		5610	240 ms				
		5300	0.589s				
Channel move		5290	0.593s	:100	3.3.4	Complian	
time	1	5580	0.502s	<10s		Complies	
		5610	0.487s				
		5300	not be less than 30 Minutes				
Non-Occupancy		5290	not be less than 30 Minutes		0.0.4	Complies	
Period		5580	not be less than 30 Minutes	30 Minutes	3.3.4		
Notos:		5610	not be less than 30 Minutes				

Notes:

1) Tests were performed using the conduction test method.

2) Channel availability check, detection threshold and non-occupancy period are not applicable to client devices.

3.2.2 DFS MEASUREMENT METHODS

a. DFS – CHANNEL CLOSING TRANSMISSION TIME AND CHANNEL MOVE TIME

Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

b.DFS – CHANNEL NON-OCCUPANCY AND VERIFICATION OF PASSIVE SCANNING

Non-occupancy Period. A channel that has been flagged as containing a radar system, either by a channel availability check or in-service monitoring, is subject to a non-occupancy period of at least 30 minutes. The non-occupancy period starts at the time when the radar system is detected.

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c. CHANNEL AVAILABILITY CHECK TIME

Channel Availability Check Time. A U-NII device shall check if there is a radar system already operating on the channel before it can initiate a transmission on a channel and when it has to move to a new channel. The U-NII device may start using the channel if no radar signal with a power level greater than the interference threshold values listed in paragraph (h)(2) of this section, is detected within 60 seconds.

d. CONTROL (TPC)

Compliance with the transmit power control requirements for devices is demonstrated through measurements showing multiple power levels and manufacturer statements explaining how the power control is implemented.

e. DETECTION PROBABILITY / SUCCESS RATE

During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic. Minimum 100% of the U-NII 99% transmission power bandwidth.

f. NON- OCCUPANCY PERIOD

During the 30 minutes observation time, UUT did not make any transmissions on a channel after a radar signal was detected on that channel by either the Channel Availability Check or the In-Service Monitoring

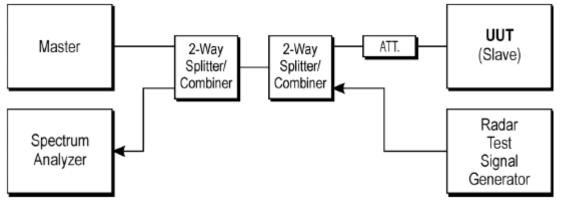
3.2.3 DFS CONDUCTION TEST METHOD

a. The signal level of the simulated waveform is set to a reference level equal to the threshold level (plus 1dB if testing against FCC requirements). Lower levels may also be applied on request of the manufacturer.

The signal level is verified by measuring the CW signal level at the coupling point to the RDD antenna port. The radar signal level is calculated from the measured level, R (dBm) and the lowest gain antenna assembly intended for use with the RDD

If both master and client devices have radar detection capability then the radar level at the non RDD is verified to be at least 20dB below the threshold level to ensure that any responses are due to the RDD detecting radar.

The antenna connected to the channel monitoring subsystem is positioned to allow both master and client transmissions to be observed, with the level of the EUT's transmissions between 6 and 10dB higher than those from the other device.



b.*Set-upB* is a set-up whereby the UUT is an RLAN device operating in slave mode, with or without Radar Interference Detection function. This set-up also contains an RLAN device operating in master mode. The radar test signals are injected into the master device. The UUT (slave device) is associated with the master device. Figure 5 shows an example for *Set-up B*. The set-up used shall be documented in the test report.



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3.2.4 DFS Test Data

Band II

HT20 Channel move time & Channel Closing Transmission Time for Type 0 radar.

	RF 50 Ω	AC		SENSE:PULSE		ALIGN AUTO	04:43:38 PM	I Jul 07, 2018	
	11.4400 s			rig: Free Run tten: 18 dB	Avg T	ype: Log-Pwr	TYPE	123456 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	Marke
	Radar S	Ŭ	.ow A	tten: 18 ab			Mkr3 1		Select M
V	Ref -28.80 c	abm anssmission					-70.7	o u Bill	
	Char	nnel Closing Tran	ismission Ti	me					M
\checkmark									
					3				
			و يواد ال المان من ا	An a super distance in the	0 °	100 m J . 11 5 45 3 19	das Liffe, dia andre a d	a land on the state	
		Channel move tin	ne						
	00000000 G 0 MHz		VBW 3.0	MHz		Sweep	Sp 20.00 s (1	an 0 Hz 001 pts)	
W 3. De her	0 MHz	×		Y	FUNCTION	Sweep		001 pts)	
W3. Deitri	0 MHz sci	× 1.440	s -3	Y 2.86 dBm	FUNCTION	· · ·	20.00 s (1	001 pts)	
W 3. De Trai 1	0 MHz	×	s -3 s -7	Y	FUNCTION	· · ·	20.00 s (1	001 pts)	Prop
W 3. De Tro 1	0 MHz t t	× 1.440 2.000	s -3 s -7	Y 2.86 dBm 0.24 dBm	FUNCTION	· · ·	20.00 s (1	001 pts)	Prop
W 3. De Tro 1	0 MHz t t	× 1.440 2.000	s -3 s -7	Y 2.86 dBm 0.24 dBm	FUNCTION	· · ·	20.00 s (1	001 pts)	Prop
W 3. De Tro 1	0 MHz t t	× 1.440 2.000	s -3 s -7	Y 2.86 dBm 0.24 dBm	FUNCTION	· · ·	20.00 s (1	001 pts)	Prop
W 3. De Tro 1	0 MHz t t	× 1.440 2.000	s -3 s -7	Y 2.86 dBm 0.24 dBm	FUNCTION	· · ·	20.00 s (1	001 pts)	Prop
W 3.	0 MHz t t	× 1.440 2.000	s -3 s -7	Y 2.86 dBm 0.24 dBm	FUNCTION	· · ·	20.00 s (1	001 pts)	Prop

Note:

Dwell (20 ms)= Sweep Time (20010 ms) / Sweep Point Bins (1001) Channel Closing Transmission Time (200 + 40 ms) = 200 + Number (2) X Dwell (20 ms) < 260ms

02:03:03 PM Jul 07, 2018 TRACE 1 2 3 4 5 6 TYPE WWWWWW DET N N N N N Marker Marker 1 Δ 1.80000 ks Avg Type: Log-Pwr PNO: Fast ↔ Trig: Free Run IFGain:Low Atten: 18 dB PREAMP Select Marker ∆Mkr1 1.800 ks -36.77 dB Ref -28.80 dBm 8 dB/div 36.8 Norma 44.1 -60.8 1∆2 Delta -68.8 -76.8 -84.8 -92.8 Fixed Center 5.300000000 GHz Res BW 3.0 MHz Span 0 Hz Sweep 2.000 ks (1001 pts) VBW 3.0 MHz Off MKR MODE TRC SCL FUNCTION WIDTH EUNCTION VALUE FUNCTION Δ2 F (Δ) 1.800 ks (∆) 76.00 s -36.77 dB -32.94 dBm 1 2 3 4 5 6 7 8 9 10 11 t Properties► More 1 of 2 STATUS

HT20 / Non- Occupancy Period



HT80 Channel move time & Channel Closing Transmission Time for Type 0 radar.

Agilent Spe	ectrum Analyzer - Si								
<mark>(X)</mark> ∟ Markor	RF 50: r 3 11.4000 s		SENS	E:PULSE		ALIGN AUTO : Log-Pwr	03:31:36 PM Jul 07, TRACE 1 2 3		Marker
marker	PREAMP		ast 🛶 Trig: Free ow Atten: 18				DET N N N	101010	Select Marker
8 dB/div		ar Signal) dBm					Mkr3 11.4 -71.02 d		3
-36.8	Cha	Innel Closing Trans							Normal
-60.8 -68.8 -76.8	Char	nel move time		3					Delta
-84.8 -92.8 -101									Fixed⊳
	• 5.290000000 N 3.0 MHz		VBW 3.0 MHz			Sweep	Span (20.00 s (1001		Off
	E TRO SCL	×	Y COLOR	FUNC	TION FUN	ICTION WIDTH	FUNCTION VALUE	-	
1 N 2 N 3 N 4 5 6	1 t 1 t 1 t	1.400 1.920 11.40	s -70.90 di	3m				=	Properties►
5 6 7 8 9 10 11								_	More 1 of 2
MSG						STATUS	;	>	

Note:

Dwell (20 ms) = Sweep Time (20010 ms) / Sweep Point Bins (1001)

Channel Closing Transmission Time (200 + 40 ms) = 200 + Number (2) X Dwell (20 ms) < 260ms

	02:50:18 PM Jul 07, 2018	ALIGN AUTO	SENSE:PULSE		RF 50 Ω AC		
Marker	TRACE 1 2 3 4 5 6	g Type: Log-Pwr	Trig: Free Run		Δ 1.80000 ks	er 1.	e
Select Ma	DET NNNNN		Atten: 18 dB	PNO: Fast ↔ IFGain:Low	PREAMP		
	Mkr1 1.800 ks -30.54 dB	Δ			Ref -28.80 dBm	v	di
					"Radar Signal		
No					12	X	
				1	EUT Transmision		
						1	
	142	Noise Floor					
			/			- 1	
F							
F			30min				
F	Snan û Hz		30min		20000000 GHz	r 5 1	ter
F	Span 0 Hz .000 ks (1001 pts)	Sweep 2	30min .0 MHz	VBW	290000000 GHz .0 MHz		
F		Sweep 2. FUNCTION WIDTH	.0 MHz Y FUT		.0 MHz C scl X	W 3. De III	B
F	.000 ks (1001 pts)	· · ·	.0 MHz	VBW 1.800 ks (Δ) 120.0 s	.0 MHz	W 3. De Du	B ¹ A2
	.000 ks (1001 pts)	· · ·	.0 MHz Y FU -30.54 dB	1.800 ks (Δ)	.0 MHz C SCL × t (Δ)	W 3. De Du	B ¹ A2
	.000 ks (1001 pts)	· · ·	.0 MHz Y FU -30.54 dB	1.800 ks (Δ)	.0 MHz C SCL × t (Δ)	W 3. De Du	B IOI
Prope	.000 ks (1001 pts)	· · ·	.0 MHz Y FU -30.54 dB	1.800 ks (Δ)	.0 MHz C SCL × t (Δ)	W 3. De Du	B ¹ A2
Prope	.000 ks (1001 pts)	· · ·	.0 MHz Y FU -30.54 dB	1.800 ks (Δ)	.0 MHz C SCL × t (Δ)	W 3. De Du	B ¹ A2
Prope	.000 ks (1001 pts)	· · ·	.0 MHz Y FU -30.54 dB	1.800 ks (Δ)	.0 MHz C SCL × t (Δ)	W 3. De Du	B

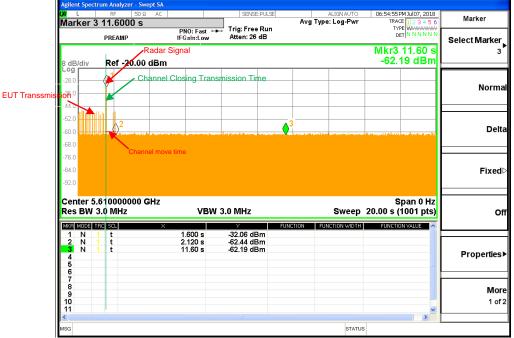
HT80 / Non- Occupancy Period



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Band III

HT20 Channel move time & Channel Closing Transmission Time for Type 1 radar.



Note:

Dwell (20 ms)= Sweep Time (20010 ms) / Sweep Point Bins (1001)

Channel Closing Transmission Time (200 + 40 ms) = 200 + Number (2) X Dwell (20 ms) < 260ms



HT20 / Non- Occupancy Period



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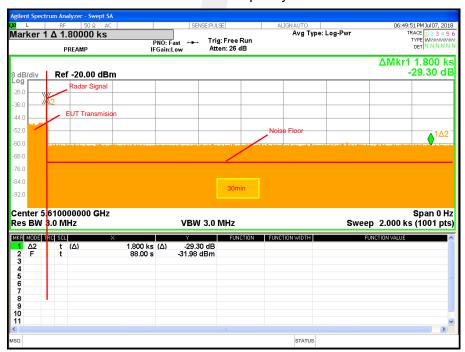
HT80 Channel move time & Channel Closing Transmission Time for Type 1 radar.

Agilent Spect	rum Analyzer	- Swept SA								
XI L		50Ω AC		SENSE:P	JLSE		ALIGN AUTO		1 Jul 07, 2018	Marker
Marker 3	3 11.6000)s	PNO: Fast +++	Trig: Free R	un	Avgiyp	e: Log-Pwr	TYPE	123456 Winterfeature	
	PREAMP		IFGain:Low	Atten: 26 di				DET	NNNNN	Select Marker
		Radar Signal						Mkr3 1	1.60 s	3
8 dB/div	Ref -2	.00 dBm							9 dBm	, , , , , , , , , , , , , , , , , , ,
			ng Transmission	Time						
-28.0			ig transmission	Time						
-36.0		EUT	Transsmission							Norma
-44.0										
11.41										
-52.0	<u>^2</u>				▲3					B.#-
-60.0		harden bereiten be		and the difference of the	.	and dependent		An and the second	- Instantin	Delta
-68.0		Channel move	time							
-76.0										
-84.0										Fixed⊳
										Fixed
-92.0										
Contor 5	.6100000							Sn	an 0 Hz	
Res BW		OU GHZ	VBW 3	3.0 MHz			Sweep	20.00 s (1		off
MKR MODE 1	IRC SCL	×		Y	FUNC	TION FU	NCTION WIDTH	FUNCTION	VALUE	
1 N	1 t		1.600 s	-32.06 dBm	l .					
2 N 3 N	1 t 1 t		2.120 s 11.60 s	-62.44 dBm -62.19 dBm						
	1 t		11.60 S	-62.19 dBm						Properties▶
5									E	-
6										
4 5 6 7 8 9										More
9 10										
10									~	1 of 2
<									>	
MSG							STATUS	5		
								1		

Note:

Dwell (20 ms)= Sweep Time (20010 ms) / Sweep Point Bins (1001)

Channel Closing Transmission Time (200 + 40 ms) = 200 + Number (2) X Dwell (20 ms) < 260ms



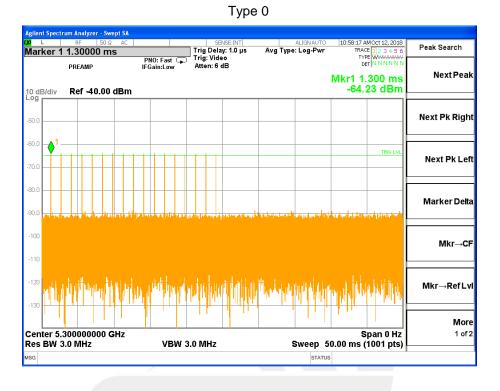
HT80 / Non- Occupancy Period





Report No.: STS1806172W05

Radar waveform calibration



Type 1

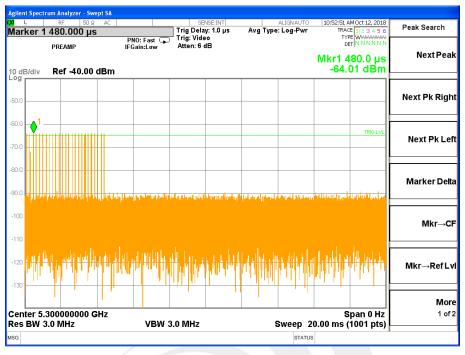


Shenzhen STS Test Services Co., Ltd.

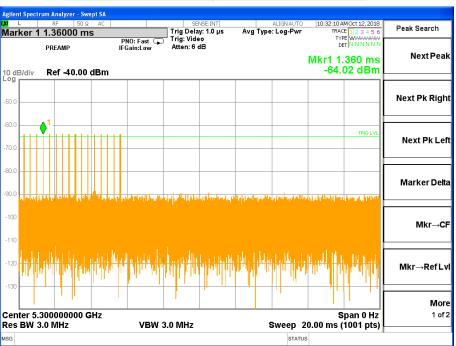


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Type 2



Type 3

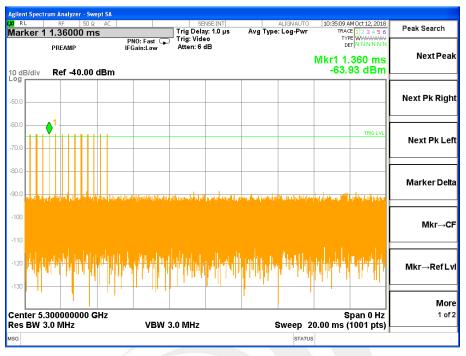


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Type 4



Type 5

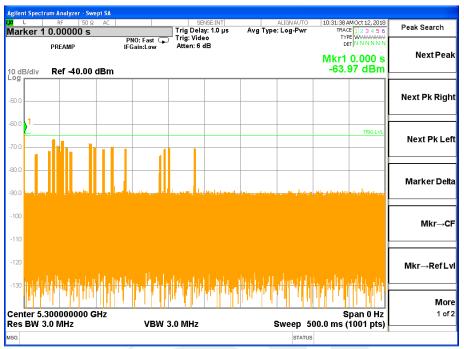






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Туре	6
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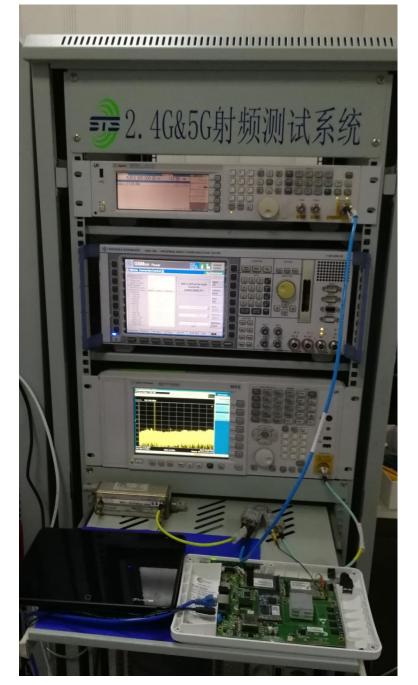


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3.2.5 DFS Test photo



** ** ** ** END OF THE REPORT ** ** ** **

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